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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/742,534	12/21/2000	Charles A. Eldering	T721-18	6855
27832	7590 07/27/2005		EXAM	INER
	OGY, PATENTS AND	SHELEHEDA	A, JAMES R	
6206 KELLERS CHURCH ROAD PIPERSVILLE, PA 18947			ART UNIT	PAPER NUMBER
			2617	
			DATE MAIL ED: 07/27/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applica	tion No.	Applicant(s)			
		09/742,	534	ELDERING, CHAI	RLES A.		
	Office Action Summary	Examin	er	Art Unit			
			Sheleheda	2617			
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Status							
1) 又	Responsive to communication(s) filed	on <i>08 June 2005</i>					
	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.						
3) 🗌	Since this application is in condition fo	_		osecution as to the	merits is		
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositio	on of Claims			•			
5)⊠ 6)⊠ 7)⊠	<ul> <li>4)  Claim(s) 1,2,4-17,20,22-28,32-34,36 and 38-51 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) 13-17, 26-28, 32-34, 36, 38-50 is/are allowed.</li> <li>6)  Claim(s) 1,2,4-12,20,22,23 and 51 is/are rejected.</li> <li>7)  Claim(s) 24 and 25 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Application	on Papers						
10) 🔲 1	The specification is objected to by the Inflormation is objected to by the Inflormation is larger is larger and specificant may not request that any objection is specifically specifically including the specifical includin	) ☐ accepted or long to the drawing(s e correction is requ	) be held in abeyance. Se sired if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 Cl	• •		
11)[1	The oath or declaration is objected to b	y the Examiner. I	Note the attached Office	e Action or form P1	O-152.		
Priority u	nder 35 U.S.C. § 119						
a)[	Acknowledgment is made of a claim for All b) Some * c) None of:  1. Certified copies of the priority do  2. Certified copies of the priority do  3. Copies of the certified copies of application from the International ee the attached detailed Office action to	ocuments have be ocuments have be the priority docur I Bureau (PCT R	een received. een received in Applicat nents have been receiv ule 17.2(a)).	ion No ed in this National	Stage		
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Attachment	(S) of References Cited (PTO-892)		4) Interview Summary	/ (PTO-413)			
2) Notice 3) Inform	e of Draftsperson's Patent Drawing Review (PTC nation Disclosure Statement(s) (PTO-1449 or PT No(s)/Mail Date <u>6/8/05</u> .		Paper No(s)/Mail D 5) Notice of Informal I 6) Other:	ate	)-152)		

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 2, 4-8 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (Hendricks) (6,463,585) (of record).

As to claim 1, Hendricks discloses a method of transmitting television programming and advertising from a headend to subscribers at a plurality of subscriber nodes (column 18, lines 20-32), said method comprising the steps of:

- (a) creating a plurality of subscriber groups (Fig. 32; column 26, lines 54-67 and column 72, lines 23-45), members of said subscriber groups being based on at least one characteristic of said subscriber relevant to advertising (column 29, lines 33-44);
- (b) receiving at least one programming channel of television programming(column 18, lines 38-64);
- (c) forming from said at least one programming channel a plurality of presentation channels of television programming (feeder channels containing alternative ads assigned to the particular program channel; column 29, line 61-column 30, line 25) identical to said at least one programming channel (identical in advertisement

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placements and timeslots; column 30, lines 8-53), each presentation channel corresponding to one of the subscriber groups (column 30, lines 45-53);

- (d) storing a plurality of advertisements for insertion into advertising avails in said presentation channels (column 31, lines 28-55);
- (e) storing for the presentation channel a list of advertisements (column 31, lines 28-36);
- (f) determining advertising avails in each of said presentation channels (column 30, lines 8-29 and column 31, lines 7-27);
- (g) for each presentation channel, determining an advertisement to be inserted in each avail in said presentation channel (column 31, lines 28-55);
- (h) inserting said advertisement determined in step (g) into said corresponding avail (column 31, lines 28-55); and
- (i) transmitting each of said presentation channels to at least those subscriber nodes in said subscriber group corresponding to said presentation channel (wherein every subscriber receives each alternative ad channel and tunes to one dependent upon their group; column 18, lines 20-32, column 30, lines 25-54 and column 72, lines 23-45).

While Hendricks discloses storing a listing of advertisements and inserting the advertisements into the presentation channels based upon the list, he fails to disclose the use of queues comprising an ordered list of advertisements resource locators, said ARL's comprising a pointer to a location of a corresponding advertisement and inserting the advertisements in accordance with the queue.

The examiner takes Official Notice that it was notoriously well known in the art at the time of invention by applicant to utilize a queue to properly indicate the order in which actions are to be performed, such as the order in which upcoming advertisements are to be inserted, for the typical benefit of reducing processing requirements and providing more time to correctly perform a function by indicating, in advance, an order in which particular functions (such as ad insertion) are to be performed.

Further, the examiner takes Official Notice that it was notoriously well known in the art to utilize pointers which indicate the location of corresponding data, instead of manipulating the data itself, for the typical benefits of reducing memory and processor requirements by only manipulating location pointers instead of the data in it's entirety.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendricks' system to include queues comprising an ordered list of advertisements and inserting the advertisements in accordance with the queue for the typical benefit of reducing processing requirements and providing more time to correctly perform a function by indicating, in advance, an order in which particular functions (such as ad insertion) are to be performed.

Further, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to further modify Hendricks's system to include wherein said list comprises (ARLs) comprising a pointer to a location of a corresponding advertisement for the typical benefits of reducing memory and processor requirements by only manipulating location pointers instead of the data in it's entirety.

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As to claim 2, Hendricks discloses wherein each subscriber group comprises a set of subscribers that is mutually exclusive of each other subscriber group (wherein groups based solely upon ADI, or location, are inherently mutually exclusive; column 26, lines 54-67).

As to claim 4, Hendricks discloses assigning each subscriber to one or more subscriber groups (column 27, lines 1-6 and column 72, lines 23-45).

As to claim 5, Hendricks discloses creating wherein step (j) includes creating an advertising group map disclosing an advertising group to which each subscriber belongs (group assignment matrix; see column 32, Table E) and transmitting said advertising group map to said subscriber nodes (column 29, lines 45-60).

As to claim 6, Hendricks discloses wherein step (j) includes creating a presentation channel map disclosing to which advertising group each presentation channel corresponds (see table F, column 33) and wherein, responsive to receipt of said advertising group map, said subscriber nodes determine to which advertising group they belong (column 72, lines 23-45), and, responsive to receipt of said presentation channel map, said subscriber nodes create an individual channel map indicating which of said plurality of presentation channels corresponding to said at least one programming channel said subscriber node is to select when a user of said node selects one of said programming channels to view (column 72, lines 23-45).

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As to claim 7, Hendricks discloses wherein step (j) includes transmitting all of said presentation channels to all of said subscriber nodes (wherein every subscriber receives each alternative ad channel and tunes to one dependent upon their group; column 18, lines 20-32, column 30, lines 25-54 and column 72, lines 23-45).

As to claim 8, Hendricks discloses wherein, responsive to a user making a channel selection corresponding to one of said programming channels (the user selecting a particular program and channel to view; column 72, lines 40-45), said subscriber nodes select one of said presentation channels corresponding to said programming channel selected by said user in accordance with said individual channel maps (column 72, lines 23-45).

As to claim 10, Hendricks discloses wherein said advertisements are stored in digital form (wherein all signals are converted to and used in digital form; column 18, line 65-column 19, line 40).

As to claim 11, Hendricks discloses wherein said advertisements are stored in MPEG form (column 19, lines 30-40).

As to claim 12, Hendricks discloses wherein said at least one programming channel and said presentation channels are in digital format (wherein all signals are

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received in/converted to digital form for storage and use; column 18, line 65-column 19, line 40).

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks as applied to claim 1 above, and further in view of Safadi (6,487,721) (of record).

As to claim 9, while Hendricks discloses wherein said programming channel includes avails, he fails to specifically disclose wherein said programming channel includes indicators that identify the start of an avail and detecting said indicators.

In an analogous art, Safadi discloses a video server (Fig. 2) which detects indicators (cue commands) that identify the start of an ad avail (commercial insertion point; column 9, lines 13-25) in a program channel (column 4, lines 30-55 and column 9, lines 13-25) and wherein advertisements are then inserted into the detected avail (column 9, lines 13-25) for the typical benefit of allowing advertisements to be inserted into specific locations designated by a content provider (column 1, lines 26-42).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendricks' system to include the wherein said programming channel includes indicators that identify the start of an avail and detecting said indicators, as taught by Safadi, for the typical benefit of allowing content providers to specifically indicate where advertisements are to be inserted.

4. Claims 20, 22, 23 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks in view of Yuen et al. (Yuen) (6,252,634).

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As to claim 51, while Hendricks discloses an apparatus for transmitting television programming and advertising from a headend to subscribers at a plurality of subscriber nodes (Fig. 1; column 18, lines 20-32), the apparatus comprising:

a receiver for receiving a plurality of programming channels of television programming (column 18, lines 38-64);

a first memory (advertisement/promotional module, 287) for storing a plurality of advertisements for insertion into advertising avails into presentation channels (column 31, lines 28-55);

a second memory (advertisement/promotional module, 287) storing, for the presentation channels, a list of advertisements (column 31, lines 28-36);

a circuit (break management engine, 305) for determining advertising avails in each of said presentation channels (column 30, lines 8-29 and column 31, lines 7-27);

an advertisement management circuit (spot placement engine, 307) coupled to said second memory (Fig. 4a) and adapted to determine which advertisements are to be inserted in which avails in said presentation channels (column 31, lines 28-55), said advertisement management circuit configured to generate an advertising group map disclosing an advertising group to which each subscriber belongs (group assignment matrix; see column 32, Table E);

an advertisement insertion circuit coupled to said presentation channels and adapted to insert said advertisements into said avails (column 31, lines 28-55 and column 72, lines 57-64); and

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a transmitter adapted to transmit said plurality of presentation channels (column 18, lines 20-32, column 30, lines 25-54 and column 72, lines 23-45) and said advertising group map to said subscriber nodes (column 72, lines 23-45).

While Hendricks discloses storing a listing of advertisements and inserting the advertisements into presentation channels based upon the list, he fails to disclose the use of queues comprising an ordered list of advertisements resource locators, said ARL's comprising a pointer to a location of a corresponding advertisement, inserting the advertisements in accordance with the queue and a plurality of splitters, each splitter splitting a programming channel into a plurality of presentation channels.

The examiner takes Official Notice that it was notoriously well known in the art at the time of invention by applicant to utilize a queue to properly indicate the order in which actions are to be performed, such as the order in which upcoming advertisements are to be inserted, for the typical benefit of reducing processing requirements and providing more time to correctly perform a function by indicating, in advance, an order in which particular functions (such as ad insertion) are to be performed.

Further, the examiner takes Official Notice that it was notoriously well known in the art to utilize pointers which indicate the location of corresponding data, instead of manipulating the data itself, for the typical benefits of reducing memory and processor requirements by only manipulating location pointers instead of the data in it's entirety.

Additionally, in an analogous art, Yuen discloses a television transmission system (Fig. 2) wherein programming channels from a plurality of sources (WGN, KABC, KCET etc...; see Figs. 2 and 6) are transmitted to a plurality of splitters which

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split the channels into a plurality of presentation channels (wherein the signals are split to be transferred to individual local cable companies; see Figs. 2 and 6) for the typical benefit of allowing a plurality of local cable companies to all receive broadcast television content (column 4, lines 27-44 and as seen in Figs. 2 and 6).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendricks' system to include queues comprising an ordered list of advertisements and inserting the advertisements in accordance with the queue for the typical benefit of reducing processing requirements and providing more time to correctly perform a function by indicating, in advance, an order in which particular functions (such as ad insertion) are to be performed.

Further, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to further modify Hendricks's system to include wherein said list comprises (ARLs) comprising a pointer to a location of a corresponding advertisement for the typical benefits of reducing memory and processor requirements by only manipulating location pointers instead of the data in it's entirety.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to further modify Hendricks's system to include a plurality of splitters, each splitter splitting a programming channel into a plurality of presentation channels, as taught by Yuen, for the typical benefit of allowing television content to be received by a plurality of local cable companies.

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As to claim 20, Hendricks and Yuen disclose wherein said subscriber nodes comprise:

a receiver for receiving at least some of said presentation channels (see Hendricks at column 72, lines 40-45) and said advertising group map (see Hendricks at column 72, lines 23-45); and

a circuit for determining, based on said received advertising group map, to which advertising group the subscriber node belongs (see Hendricks at column 72, lines 23-45).

As to claim 22, Hendricks and Yuen disclose wherein said advertising management circuit generates a presentation channel map disclosing to which advertising group map each presentation channel corresponds (see Hendricks at table F, column 33), and causes said transmitter to transmit said presentation channel map to said subscriber nodes (see Hendricks at column 72, lines 23-45).

As to claim 23, Hendricks and Yuen disclose wherein said subscriber nodes further comprise:

a circuit for generating, responsive to receipt of said presentation channel map, an individual channel map dictating which of said plurality of presentation channels corresponding to said at least one programming channel said subscriber node is to select (column 72, lines 23-45) when a user of said subscriber node selects one of said programming channels to view (column 72, lines 40-45).

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### Response to Arguments

5. The Official Notice presented in the prior action stating that it was notoriously well known in the art to utilize pointers which indicate the location of corresponding data was not traversed and is accordingly taken to be an admission of fact.

### Allowable Subject Matter

- 6. Claims 13-17, 26-28, 32-34, 36 and 38-50 are allowed.
- 7. Claims 24 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

**8.** The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Doherty (US2003/0200128A1) directed towards displaying advertisements in accordance with a schedule consisting of pointers to ad locations in memory.

Guyot (6,119,098) directed towards inserting advertisements in accordance with an ad queue.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (571) 272-7357. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James Sheleheda Patent Examiner Art Unit 2617

JS

VIVEK SRIVASTAVA PRIMARY EXAMINER